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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,303	12/02/2005	Colin Dunlop	GRIHAC P44AUS	3549
20210	7590	10/06/2006	EXAMINER	
DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			HUGHES, SAMUEL T	
			ART UNIT	PAPER NUMBER
			3700	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/538,303

Applicant(s)

DUNLOP, COLIN

Examiner

Tom Hughes

Art Unit

3700

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/9/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 15-21, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by USP 5,165,400 to Berke.

(Claim 15) The convective article of Berke creates a “blanket” of warm air surrounding a patient receiving space during treatment. It comprises two layers as seen in figure 4 formed in a tubular hollow space arrangement and receives warmed air from a heating unit 11.

(Claim 16) Figure 2 shows the tubular arrangement surrounding the patient receiving space on three sides.

(Claim 17) The portion of the surface with air holes 20 is “pervious” to air. See col. 3, lines 61-68.

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(Claim 18) A surface of the blanket is capable of repelling fluid. See col. 3, line 33.

(Claims 19-21) As can be seen in figure 1, the space is sized and shaped to receive a human being and is also capable of receiving an animal, such as a large dog.

(Claims 27 and 28) Berke teaches a method of warming a patient during treatment (see the abstract) which clearly sets forth receiving a patient within a patient receiving space (see figure 1). The patient's body is clearly accessible for surgery or other treatment. Warm air is passed from the holes 20 of the hypothermia article 10 into the patient receiving space to keep the patient warm. See the abstract. Note that the article 10 creates a blanket of warm air surrounding a patient in the patient receiving space.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 15-21, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of USP 5,165,400 to Berke.

It is noted that the previous rejection of the claims under 35 USC 102 was made given the broadest reasonable interpretation of surgical warming "blanket". This rejection is set forth to address the invention giving the term "blanket" a more narrow interpretation in the interest of addressing the core of applicant's invention.

On page 1 of applicant's specification, applicant admits that it is known to provide patient warming systems in the form of a patient warming "blanket" and a heating unit having certain structure (AAPA). AAPA, however, does not teach the warming blanket being arranged in operation to form a substantially tubular arrangement and other structural features brought out in the dependent claims.

Berke teaches a patient warming article 10 as set forth in paragraph 2 above which comprises a tubular arrangement surrounding a patient receiving space.

It would have been obvious to one of ordinary skill in the art, at the time of invention, to have modified the patient warming blanket of AAPA to have a tubular

arrangement, as taught by Berke, in order to provide such an article which is economical to produce, easy to use and provides features deemed desirable by medical professionals. Note that the limitations of the dependent claims are taught by the combination of AAPA/Berke and are set forth in paragraph 2 above.

6. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Berke (alone as set forth in paragraph 2 above) or AAPA in view of Berke (as set forth in paragraph 7 above), in view of USP 5,241,951 to Mason et al.

Both Berke and AAPA/Berke as set forth above teach the invention except for providing a feedback means for determining the attached state of a patient warming blanket and disabling delivery of warm air to the blanket if it is not attached.

Mason et al. teach a therapeutic fluid circulation system where a pad 12 is provided with either cold or warm fluid (col. 3, lines 37-45) via ports 16, 18. Couplings 26, 28 are "further provided with an internal shut off valve which automatically closes lines 20, 22 and ports 16, 18 when the couplings are disconnected". See col. 4, lines 5-9. Note that this set up would inherently require a means (sensors, etc.) for determining whether a patient-warming blanket is attached. To the extent such a means is not inherent, this examiner takes official notice that sensors are well known in the prior art to determine fluid flow discontinuity

It would have been obvious to one of ordinary skill in the art, at the time of invention, to provide the system of either Berke or AAPA/Berke with an internal shut off valve which automatically closes the fluid ports when the couplings are disconnected, in

light of the teachings of Mason et al. and the official notice taken, in order to realize the inherent safety benefits of such a automatic disconnect.

7. Claims 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Berke (alone as set forth in paragraph 2 above) or AAPA in view of Berke (as set forth in paragraph 7 above), in view of USPGPUB 2004/015132 to Cobb et al.

Both Berke and AAPA/Berke as set forth above teach the invention except for providing a feedback means for determining the attached state of a patient warming blanket and disabling delivery of warm air to the blanket if it is not attached.

Cobb et al. teach a warm air blower for medical warming blankets. See the abstract. Warm air is fed via conduit 102. Cobb teaches that "improper attachment of the flexible conduit 102 is detected by a hose connection sensor 110". See paragraph 45. Cobb et al. goes on to state that "hose connection sensor 110 can be a micro-switch suitably placed to detect the improper attachment of the flexible conduit 102 to the warm air blower system 100". This warm air blower assembly includes a control unit which, upon sensing, "will cause the system to automatically cease heating and air blowing". See paragraph 44.

It would have been obvious to one of ordinary skill in the art, at the time of invention, to provide the system of either Berke or AAPA/Berke with the automatic disconnect control of Cobb et al., in order to realize the inherent safety benefits of such an automatic disconnect.


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Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USP 6,354,099 to Bieberich teaches that natural openings in porous, fibrous or otherwise air permeable materials are functionally equivalent to relatively large openings (see col. 6, lines 36-40 of Bieberich). The remaining references to Suzuki et al., Gammons et al., Augustine et al. and Shigezawa et al. are cited for their thermal blanket structure and function.

Contact Information

9. Any inquiry concerning this communication should be directed to Tom Hughes at telephone number 571-272-4357.


Tom Hughes
SPE
TC 3700

sth
9/28/06